

Hazard Analysis Selection Matrix

For new, modified or relocated processes, equipment or experiments, or scale-up of previous work, characterize your process according to the criteria below. Then use the most detailed analysis method called for by any single criterion.

Laboratory: Building _____ **Room** _____ **Responsible Org. Code:** _____

Laboratory Description:

| | No Review Required | LHR | MHR | HHR |
|--|------------------------|--------------------------------------|-----------------------|-------------------|
| 1. Material Hazard - Acute Toxicity | | | | |
| HMIS Health Rating: Circle the Hazardous Material Identification System rating, found in the Material Safety Data Sheet (MSDS) | 0 | 1-2 | 3 | 4 |
| Cylinder DOT Label: if a cylinder, circle Yes if the DOT label on the cylinder indicates Poison Gas, Corrosive Gas, or Flammable Gas | | | Yes | |
| 2. Material Hazard - Chronic Toxicity (Circle Yes if the MSDS indicates the material exhibits Chronic Toxicity) | | | Yes | |
| 3. Material Hazard - Flammability (Choose applicable line and circle the HMIS rating from the MSDS) | | | | |
| < 1 Liter & HMIS Flammability Rating | 0-1 | 2-4 | | |
| > 1 Liter & HMIS Flammability Rating | 0 | 1-2 | 3-4 | |
| ≥ 1 Liter and under Pressure or above Flash Point & HMIS Flammability Rating | 0 | | 1 | 2-4 |
| 4. Material Hazard - Reactivity (Circle one) | | | | |
| HMIS Reactivity Rating from MSDS | 0-1 | 2 | 3-4 | |
| 5. Processing Hazard - Radiation (Circle all that apply) | | | | |
| Laser | | Class I-IIIa | Class IIIB-IV | |
| X-Ray Source | | <20kv | >20kv | |
| Radioisotopes in use | None | | Yes | |
| UV, Infra-red, Microwave, Radio wave | | <TLV | >TLV | |
| 6. Processing Hazard - Pressure (Circle any one that applies) | | | | |
| Non-glass | = 0 psig | < 0 psig or > 0 psig & <90psig | >90psig | |
| Glassware | | | < 0 or > 0 psig | |
| 7. Processing Hazard - Chemical Reaction Energy | | | | |
| Will adiabatic reaction lead to temperature change? Circle one that applies (Check MSDS) | < 60° F | | > 60° F | |
| Will this cause solvent to boil? Circle Yes if applicable | | | Yes | |
| 8. Processing Hazard - New Technology | | | | |
| New chemistry of technology. Circle correct answer if applicable | None | | Outside of Experience | Unknown Reactions |
| 9. Equipment Hazard - Electrical (Circle one if applicable) | Protected < 120V | Exposed or > 120V | | |
| 10. Equipment Hazard - Mechanical (Circle Yes or No) | | | | |
| Exposed pinch points, belts, chains, rotating parts, knives, suspended loads, stored energy, etc. | Yes | No | | |
| 11. Processing Hazard - Thermal | | | | |
| Unprotected heated or chilled surfaces | > -20° F & < 140° F | < -20° F & > 140° F | | |
| 12. Environmental Hazards | | | | |
| Noise (Circle one. Call x6-6669 if you need assistance) | < 80 dBA | > 80 dBA | | |
| Hood Ventilation Testing (Circle one if applicable) | | Exemption | Permit | |

Contact the Occupational Safety and Health (OSH) Division, Code 350 for assistance in completing this matrix

Acronyms

| | | |
|-------------------------------------|---|------------------------------|
| DBA decibels, A-scale | HMIS Hazardous Material Identification System | TLV Threshold Limit Value |
| DOT Department of Transportation | OT Odor Threshold | |

| | | | |
|-------------|------|-----------------------|------|
| Branch Head | Date | Supervisor's Designee | Date |
|-------------|------|-----------------------|------|